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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,245	10/07/2005	Akihito Shirai	28951.5422	8844
53067	7590	12/28/2007	EXAMINER	
STEPTOE & JOHNSON LLP			PHAN, THIEM D	
1330 CONNECTICUT AVE., NW			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20036			3729	
MAIL DATE		DELIVERY MODE		
12/28/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/552,245	SHIRAI, AKIHITO	
Examiner	Art Unit		
Tim Phan	3729		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1)  Responsive to communication(s) filed on 11 September 2007.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4)  Claim(s) 1-4 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-4 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 07 October 2005 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_ .  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/07/05. 5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of Group II, Claims 3 and 4, filed on 9/11/07 is acknowledged and upon further consideration by the examiner, the previous Restriction Requirement (telephoned on 8/29/07) has been withdrawn due to PCT case where there is no unity of invention as the two independent Claims (1 & 3) do form a single general inventive concept under PCT Rule 13.1 and they do have the same or corresponding special technical features under PCT Rule 13.2.

An Office Action on the merits of Claims 1-4 now follows.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Helmut et al (JP 2000-350404).

**With regard to claim 1**, Helmut et al teach a spindle motor, comprising a rotor yoke (Fig. 1, 2) having a rotor magnet (Fig. 1, 3) on an inner surface and being rotationally supported on a motor base (Fig. 1, 21) via a shaft (Fig. 1, 35), and a stator core (Fig. 1, 12) constituted of a plurality of winding parts (Fig. 1, 9) each having an end opposed to the rotor magnet, wherein

- the plurality of winding parts (Fig. 1, 9 & 4) constituting the stator core are cut to be like tongues (Fig. 2, 13) along a radial direction of a hole (Fig. 1, area for 35) and integrated, the hole having been formed on the motor base to support the rotor yoke via the shaft, and each of the winding parts (Fig. 1, 9 & 4) is bent such that the end of the winding part (Fig. 1, 12) is opposed to the rotor magnet (Fig. 1, 3).

**With regard to claim 2**, Helmut et al teach that the motor base or base plate has the plurality of winding parts is entirely formed of a silicon steel plate or the like (Fig. 1, 4; paragraph 0011, last 2 lines).

**With regard to claim 3**, Helmut et al teach a process of making a spindle motor, comprising a rotor yoke (Fig. 1, 2) having a rotor magnet (Fig. 1, 3) on an inner surface and being rotationally supported on a motor base (Fig. 1, 21) via a shaft (Fig. 1, 35), and a stator core (Fig. 1, 12) constituted of a plurality of winding parts (Fig. 1, 9 & 13) each having an end opposed to the rotor magnet, wherein the method comprises:

- forming, on the motor base (Fig. 1, 21), a hole (Fig. 1, area for 35) for supporting the rotor yoke via the shaft;
- cutting the plurality of winding parts (Fig. 2, 13) constituting the stator core (Fig. 1, 4), to be like tongues along a radial direction of the hole, and integrating the winding parts (Fig. 2, 13) on the motor base; and
- bending each of the winding parts (Fig. 2, 13 & 32) such that the end of the winding part (Fig. 1, 12) is opposed to the rotor magnet (Fig. 1, 3).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made..

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helmut et al in view of Katuo et al (GB 2159078).

Helmut et al teach a process of making a spindle motor including the bent core plate (Fig. 1, 4) and the metal plate (Fig. 1, 21), which reads on applicant's claimed invention; except for having the winding parts formed from the metal base.

Katuo et al teach a method of manufacturing an electric motor with the core plate (Fig. 8, 2a) press-punched or stamped from the same metal base (Fig. 8, 2) in order to obtain small size motor (Abstract).

It would be obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Hemut et al, by applying the stamped core plate from the same metal base plate, as taught by Katuo et al and not its general structure, in order to obtain small size motor by eliminating a different metal base as in Helmut et al' invention.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M & Tu, 6AM - 2PM, and W & Th, 9AM – 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tim Phan  
Examiner  
Art Unit 3729

tp  
December 25, 2007